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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/396,228	09/15/1999	KUMAR RAMASWAMY	EL278372827U	7137

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EXAMINER

JAGANNATHAN, MELANIE

ART UNIT PAPER NUMBER

2666

DATE MAILED: 12/01/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/396,228

Applicant(s)

RAMASWAMY ET AL.

Examiner

Melanie Jagannathan

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Upon further review of correspondence dated 9/22/2003, Examiner withdraws finality of rejection dated 4/7/2003 and submits new grounds of rejection.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Sartain et al. US 6,169,747.

Regarding claims 1-3, 8-10, the claimed source of input packets and input packet buffer is disclosed by stream of digital data in and buffer (Figure 5, element 111). The claimed input packet buffer generating status signal indicating whether input packet buffer is full, empty or neither empty or full is disclosed by monitor (element 133) in buffer that tests for underflow, overflow, near underflow and near overflow and monitor sends signal indicating status to controller (Figure 6, element 137) within variable interpolation filter (Figure 6, element 145). See column 3, lines 44-65 and column 4, lines 29-62. The claimed control signal generator, responsive to status signal, generating the control signal is disclosed by controller in variable interpolation filter receiving status signal and this causes the variable interpolation filter to alter the number of samples per frame based on underflow, overflow, near overflow and near

underflow conditions. The claimed output packet stream generator responsive to output clock signal is disclosed by variable interpolation filter (Figure 8, element 149) coupled to master clock (Figure 8, element 151).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sartain in view of Sato et al. US 5,566,174.

Regarding claim 4, Sartain discloses all of the limitations of the claim except for null packets and null packets are deleted from the input packet transport buffer. Sartain discloses status signal for indicating input packet buffer is full. Sato et al. discloses null packet generator (Figure 6, element 49). Sato discloses a method where null packets are inserted into the packet

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stream when it is necessary. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to delete unwanted packets when the buffer is full according to method and variable interpolation filter of Sartain. A person of ordinary skill in the art would be motivated to do this as it ensures proper flow control in the system.

Regarding claims 5-7, Sartain discloses all the limitations of the claims except for a source of additional packets representing auxiliary data, a source of null packets and multiplexer. Sato et al. discloses a trickmode packet generator (Figure 7, element 16) which anticipates a source of additional packets representing auxiliary data. A null packet generator (element 49) anticipates the source of null packets. These additional packets are inserted into the stream when necessary. See column 9, lines 66-67 and column 10, lines 1-2. Additionally, Sato discloses a multiplexer, element 62, which combines packets from the input transport packet stream (packets from element 61) and additional packets (elements 16 and 49) to generate the output packet stream. This device anticipates the disclosed output packet stream generator comprising a multiplexer for combining packets. See column 9, lines 66-67 and column 10, lines 1-2 and lines 16-18.

6. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sartain in view of Kostreski et al. U.S. Patent Number 5,734,589. Sartain discloses all the limitations of the claims except for the packet streams being compatible with one of a QAM or QPSK or VSB modulation formats. Kostreski et al. disclose a digital entertainment system including a loop transport interface. See Figure 3. The loop transport interface (element 300) includes RF modulators (element 317) implementing 64 QAM or 16 VSB modulation techniques. See

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column 19, lines 63-67 and column 20, lines 1-11. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include QAM, QPSK or VSB modulation techniques. A person of ordinary skill in the art would be motivated to do this since it conserves bandwidth.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sartain in view of Horton U.S. Patent Number 5,969,770. Sartain discloses all the limitations of the claims except for a system where the source of input transport packet stream represents auxiliary on-screen display information (claim 12). Horton discloses a digital television system, which processes television information in the form of stream data packets representing video and audio information and includes on-screen display (OSD) provisions. See abstract and column 2, lines 55-63. Additionally, a multiplexing arrangement is provided to multiplex digital signals representing the graphics image data. See abstract. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include a source of on-screen display information. A person of ordinary skill in the art would be motivated to do this in order to display status information and instructions to the user so he/she can, for instance, set the picture brightness and contrast of the television receiver or set recording times and channel number for program recording by a VCR.

#### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection. Upon further review, Examiner withdraws finality of rejection dated 4/7/2003 and submits new grounds of rejection herewith.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 703-305-8078.

The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 703-308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Melanie Jagannathan  
Patent Examiner  
AU 2666

MJ  
*[Signature]*

*Seema S. Rao*  
SEEMA S. RAO 11/25/03  
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